

## CLAIMS

We claim:

1. An implant having a surface, a surface structure on at least a portion of said surface, the surface structure improving ingrowth characteristics associated with the implant.
2. The implant as set forth in claim 1, wherein the implant comprises a non-biosorbable material.
3. The implant as set forth in claim 2, wherein said surface structure is provided in a region of the implant, wherein, after the implant has been implanted in a body, the surface structure is generally adjacent to the skin.
4. The implant as set forth in claim 1, wherein the surface structure exhibits a width of approximately 1 to 10 mm.
5. The implant as set forth in claim 1, wherein the surface structure exhibits a width of approximately 4 to 5 mm.
6. The implant as set forth in claim 1, wherein the surface structure generally encircles the implant.
7. The implant as set forth in claim 1, wherein the surface structure comprises one or more grooves.
8. The implant as set forth in claim 7, wherein the depth of said at least one or more grooves is approximately 0.1 to 10 times the average width of a type of cell adjacent to the groove after the implant is implanted.

9. The implant as set forth in claim 7, wherein the depth of said at least one or more grooves is approximately 0.3 to 5 times the average width of a type of cell adjacent to the groove after the implant is implanted.
10. The implant as set forth in claim 7, wherein the depth of the at least one groove is approximately 1 to 10  $\mu\text{m}$ .
11. The implant as set forth in claim 7, wherein the depth of the at least one groove is approximately 3 to 4  $\mu\text{m}$ .
12. The implant as set forth in claim 7, wherein the width of the at least one groove is in the range of approximately 1 to 10  $\mu\text{m}$ .
13. The implant as set forth in claim 7, wherein the width of the at least one groove is in the range of approximately 4 to 5  $\mu\text{m}$ .
14. The implant as set forth in claim 7, wherein, if more than one groove is provided, the distance of the grooves from each other is approximately 2 to 20  $\mu\text{m}$ .
15. The implant as set forth in claim 7, wherein, if more than one groove is provided, the distance of the grooves from each other is approximately 10  $\mu\text{m}$ .
16. The implant as set forth in claim 7, wherein the ratio of the width of the groove to the depth of the groove is approximately 0.5 to 2.
17. The implant as set forth in claim 1, wherein at least two regions on the surface of the implant are provided with a surface structure.
18. The implant as set forth in claim 1, further comprising a holding structure with at least one passage.

19. The implant as set forth in claim 1, wherein the implant is a port body.
20. A method for producing an implant for implanting in a living body, comprising the step of providing a surface structure on a surface of said implant, wherein the surface structure improves ingrowth characteristics associated with the implant.
21. The method as set forth in claim 20, wherein the surface structure is provided by turning a groove.
22. The method as set forth in claim 20, wherein the surface structure is provided by etching.